



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF  
STATE PLANNING COORDINATION

March 2, 2004

Mr. Christopher Carbaugh  
Atlantic Group  
10038 Old Ocean City Blvd.  
Berlin, MD 21029

RE: PLUS review – Ferry Cove

Dear Mr. Carbaugh:

Thank you for meeting with State agency representatives on February 19, 2004 to discuss the Ferry Cove project to be located on 195 acres along Route 24 near Millsboro. As reviewed, this project will consist of 555 single family lots.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the State agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that Sussex County is the governing authority over this land; therefore, you will need to comply with any and all regulations/restrictions set forth by the County.

The project is located in a “Rural” area according to the 1999 *Strategies for State Policies and Spending* document. The Strategies are currently under revision, and it is possible that this designation will change. It is also located within the Environmentally Sensitive Development District according to the Sussex County plan. The developers should take care to minimize any environmental impacts of the project.

State agency comments received regarding this project are as follows:

**Public Service Commission**

The development is not within an existing CPCN area. If it will be served by an expanding water utility, it must have a Delaware Public Service Commission Certificate of Public Convenience and Need. This may be obtained by the water company providing

service. Contact person: Kevin Neilson, Delaware Public Service Commission, 861 Silver Lake Blvd. Suite 100, Dover, DE 19904  
302-739-3228

## **Department of Natural Resources and Environmental Control**

### **Water Supply**

As noted above, the project site is not currently within the certificated water service area of any public water utility. Any questions concerning CPCNs should be directed to the Public Service Commission. Should a public well be needed on site, the Well Permits Branch will consider an application for a well construction permit providing the well can be located and constructed in accordance with the current Regulations Governing the Construction and Use of Wells. Any public well must be located a minimum of 150 feet from the property lines.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Potential Contamination Sources do exist in the area, and any well permit applications will undergo a detailed review that may increase turnaround time and may require site specific conditions/recommendations. A source water protection area will be required. You can contact the Water Supply Branch at (302) 739-4793 for more information.

### **Wastewater**

The proposed project intends to provide central sewer by a community system. While the Large Systems Branch has not received notification from the consultant, rapid infiltration basins (RIBs) after advanced treatment, including nitrogen removal is being explored.

All large and community systems must meet the requirements of Section 5.12000, 7.00000 and 9.00000 of the Regulations Governing the Design, Regulations Governing the Design, Installation and Operation of On-site Wastewater Treatment and Disposal Systems. The Large Systems Branch can be reached at (302) 739-4761.

### **Soils**

The following is a summary of mapped soils found within the proposed construction; they are grouped on the basis of drainage class:

Excessively well drained – Evesboro  
Well drained- Galestown & Fort Mott

Moderately well/well drained – Pepperbox-Rosedale complex

Very poorly drained (**hydric**) – Broadkill mucky silt

Although a significant portion of the soils found on subject parcel are well drained, they have limitations associated with rapidly permeable sandy surface and subsurface horizons. Such soils are conducive to nutrient leaching via groundwater or surface runoff into the surrounding watershed.

### **Wetlands**

According to the Statewide Wetland Mapping (SWMP) maps, the western border of the parcel contains tidal and nontidal wetlands. The applicant should be reminded that they must avoid construction/filling activities in those areas containing wetlands or wetland associated hydric soils as they are subject to regulatory provisions under the Federal 404 Clean Water Act governing jurisdictional wetlands. Tidal wetlands are subject to additional and more stringent regulatory protection under the State administered Tidal Wetlands Act of 1985.

Any structure (community dock, piers, etc.) that is placed in wetlands or subaqueous lands requires the appropriate permits from the Wetlands and Subaqueous Lands Section. Contact the program at (302) 739-4691 for more details. The developer should place all tidal wetlands in a conservation easement to preclude future boardwalks and docks and other potential disturbances. Pathways, if proposed should be on the upland side and provide “vista views” only in a few areas.

The developer/consultant needs to articulate and implement a strategy to maximize buffer areas, particularly riparian areas adjacent to wetlands or waterbodies. Even though there is no “one size fits all” buffer width or length for ecological health and/or water quality, it is clear some buffering is better than no buffering. DNREC recommends One hundred (100) feet for nutrient management

### **Groundwater Recharge**

According to the Groundwater Recharge Potential map for Sussex County the project appears to be within a good to excellent recharge area. It is important to attempt to reduce or mitigate the amount of impervious surface and to minimize near surface pollutant sources. High density projects have a high probability on reducing the amount of recharge potential that the aquifers depend on. The developer is encouraged to explore pervious alternatives to paved areas and walkways.

### **Open Space Management**

While the open space proposed on the site plan may provide some benefit for recharge potential and community connectivity, the fragmented nature of the open space reduces the potential for wildlife habitat, active recreation areas, and buffer creation and enhancement.

### **TMDLs**

This project is located near and adjacent to receiving waters which have been designated as “*waters of the state*” that have Exceptional Recreational or Ecological Significance

(ERES). **ERES** waters are recognized as special assets of the State, and shall be protected and/or restored, to the maximum extent practicable, to their natural condition. This designation strongly supports land use practices that value ecological sustainability, including land use practices that reduce nutrient loading that are consistent with reductions prescribed by TMDLs.

With the adoption of Total Maximum Daily Loads (TMDL) in the Inland Bays all receiving waters (including streams and tributaries) will require one of two levels of nutrient reduction assigned on the basis of location, and are referred to as a low or high reduction zones. The high reduction zone corresponds to the western upper-headwater portion of the watershed, and requires reductions of 85 and 65 percent for nitrogen and phosphorus, respectively. **This project is proposed within the high nutrient reduction zone.**

It is recommended that the developer perform a mass nutrient budget to validate that the change in land use meets the TMDL mandate. The developer/consultant should contact Lyle Jones (739-4590) in the Department's Watershed Assessment Section for further information regarding the acceptable protocol for calculating a nutrient budget.

The developer is strongly encouraged to employ best management practices (BMPs) and other pollution control strategies for nutrients (both nitrogen and phosphorus) in stormwater management.

### **Pond Issues**

Coastal ponds typically have a high potential to serve as "nutrient sinks" which will likely facilitate or promote the excessive growth of nuisance blue-green algae. The developer is encouraged to consider design factors that will help minimize nutrients from entering the pond and protect water quality. Pond shape has an effect on water circulation with long narrow ponds tending to have more problems than circular "wide open" bodies of water.

By incorporating a raised berm with a minimum 50-foot wide buffer zone around the shoreline perimeter that is planted with native herbaceous and woody plants, it may be possible to control nuisance Canadian geese and mute swans populations.

Based on the depth to water tables in the area, it is anticipated that the ponds will require some type of impermeable liner. Subsequent discharge from these ponds to waters of the State must meet water quality parameters for ERES waters. A NPDES permit may be required.

### **Mountaire Processing Facility**

The developer should make all potential residences aware that the adjacent parcel (across from Swan Creek) is an important agricultural processing facility that will remain in the area. It is recommended that the following language be provided in all deeds and to all renters: *"This property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural*

*chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities.” (Sussex County Ordinance 862).*

### **State Resource Areas**

This project does not include lands identified as either State Resource Area or as State Natural Areas.

However, it abuts the Nature Conservancy’s Bullseye Landing Ferry Preserve to the east. DNREC is concerned that the quantity and quality of wildlife habitat in the preserve, particularly near the border, might be negatively affected by development activities, or by permanent land use changes. The Conservancy’s website states the following as reasons for the purchase of the lands that comprise this preserve.

“Coastal forests and natural river shoreline habitats throughout this region are dwindling rapidly in the face of intense development pressure along the Indian River and the fragile inland bays at the river's mouth. At the same time, many of the Delmarva Peninsula's most distinctive and imperiled species make their home this region, making its protection critical to the preservation of Delaware's biological heritage.”

It is recommended that the developer work with The Nature Conservancy’s Delaware Chapter Office, to insure that the proposed development does not negatively impact the natural resources of the preserve. The developer should contact Ellen Roca at the following:

The Nature Conservancy  
100 West 10th Street  
Suite 1107  
Wilmington, DE 19801  
Phone: (302) 654-4707  
E-mail: [Delaware@tnc.org](mailto:Delaware@tnc.org)

### **Buffers**

In the interest of water quality and wildlife habitat, it is recommended that you maintain forested buffer of at least 100 ft along Swan Creek, Indian River and associated wetlands. Buffers are an integral component of aquatic and wetland habitats, reducing the amount of sediments, pollutants, and other non-point source material that may affect the function and integrity of habitat and the condition and survivability of aquatic organisms. Forested buffers also serve as habitat for many terrestrial species that are dependent on aquatic and wetlands habitats for a portion of their annual life cycle.

DNREC recommends that all lot lines be removed from the existing forested riparian buffer and it be preserved as community open space. This will help to buffer the Indian River, Swan Creek and their associated tidal wetlands from runoff from the development.

### **Nuisance Species**

It is also recommended that the number of ponds incorporated in the subdivision design be reduced. The ponds scattered throughout the subdivision will likely attract waterfowl like resident Canada geese and mute swans that will create a nuisance for community residents. Although small numbers of these species are enjoyed by residents, geese and swans can quickly multiply and overwhelm the area. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Ponds that remain in the subdivision plan should be landscaped to deter nuisance species. Short manicured lawns around ponds provide an attractive habitat for these species. However, native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area around ponds, are not as attractive to geese because they do not feel as safe from predators and other disturbance when their view of the area is blocked. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the homeowners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

### **Department of Transportation (DelDOT)**

A traffic impact study (TIS) has been required and is now under review by this office. DelDOT expects to complete our review and comment to the County within the next 3 to 4 months.

This project would be located in an area designated in the State Strategies for Policies and Spending as Rural. Accordingly, the developer should expect to bear all costs associated with any off-site improvements that we find to be necessary in our review of the TIS.

Special steps must be taken to advise potential residents of the fact that they are purchasing a home adjacent to a poultry processing plant and the operational aspects that accompany it, including trucks hauling live birds in and products and by-products out, and significant flows of employee vehicles during shift changes.

The Wiles-Mensch Corporation has already contacted the DelDOT Subdivision Manager, Mr. John Fiori, regarding the proposed site entrances on Route 24. They should continue to coordinate with Mr. Fiori on the review of the entrance plans and the street construction plans too if the streets are to be State-maintained. Mr. Fiori may be reached at (302) 760-2260.

**State Historic Preservation Office (SHPO)**

There are two potential historic properties across Rt. 24 from the proposed development. It is suggested that you providing landscaping on the north edge of the development (as shown on the development plans) to act as buffers that will lessen any visual effects the proposed project will have on these properties. There is a high probability for prehistoric archaeological sites within the subject area, especially along Swan Creek and Indian River. We suggest the developers/applicant retain the wetlands/forested area to act as a buffer (preferably a 100 foot buffer), which will preserve any archaeological sites. Finally, if any federal permits, licenses, or funds are involved with the project, Section 106 of the National Historic Preservation Act must be complied with.

**Delaware State Fire Marshals Office**

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation:

**Fire Protection Water Requirements :**

- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- Where a water distribution system is proposed for townhouse type dwellings it shall be capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 800 feet spacing on centers are required.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

**Accessibility:**

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Route 24 must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

**Gas Piping and System Information:**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

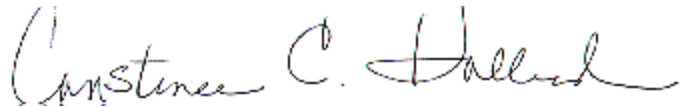
**Required Notes:**

- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Townhouse 2-hr separation wall details shall be shown on site plans
- Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: [www.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

Again, thank you for meeting with State agencies regarding this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in blue ink that reads "Constance C. Holland". The signature is fluid and cursive, with the first name "Constance" being the most prominent.

Constance C. Holland, AICP  
Director

CC: Sussex County  
Town of Millsboro